

**BALDOR • RELIANCE**

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# Customer information packet

## VEM4104T

30HP, 1760RPM, 3PH, 60HZ, 286TC, 1056M, TEFC, F

Class - None

Division - Not Applicable

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## Specifications

Enclosure	TEFC
Frame	286TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	78.000 A @ 208.0 V 76.000 A @ 230.0 V 38.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

## Part detail

Revision	V
Type	AC
Mech. spec.	10C153
Base	
Status	PRD/A
Elec. spec.	10WGY538
Layout	10LYC153
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	04-22-2015

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	38.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1056M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.76 IN
Power Factor	80
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1760 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

<b>Vibration Sensor Indicator</b>	<b>No Vibration Sensor</b>
<b>Winding Thermal 1</b>	<b>None</b>
<b>Winding Thermal 2</b>	<b>None</b>

**Nameplate**

**NP3443LUA**

<b>CAT.NO.</b>	VEM4104T	<b>CUST. P/N</b>				<b>ENCL</b>	<b>TEFC</b>
<b>SPEC.</b>	10C153Y538G2	<b>CC</b>	010A	<b>FRAME</b>	286TC	<b>SER.NO.</b>	
<b>HP</b>	30	<b>CLASS</b>	F	<b>HZ</b>	60		
<b>R.P.M.</b>	1760	<b>PH.</b>	3	<b>DES.</b>	A		
<b>VOLTS</b>	230/460	<b>CODE</b>	J	<b>ODE BRG</b>	6309	<b>DE BRG</b>	6311
<b>AMPS</b>	76/38						
<b>RATING</b>	40C AMB-CONT	<b>NEMA NOM. EFF.</b>	93.6	<b>GREASE</b>	POLYREX EM		
<b>P.F.</b>	80	<b>SER.F.</b>	1.15	<b>CT6-60H(10:1)VT3-60H(20:1)</b>			
<b>USABLE AT</b>	50Hz 30HP 190/380V 88/44A		SF1.0				
<b>VOLTS</b>	<b>AMPS</b>	<b>MAX. SPACE HEATER TEMP.</b>					

**AC Induction Motor Performance Data**

Record # 32189

Typical performance - not guaranteed values

<b>Winding: 10WGY538-R004</b>		<b>Type: 1056M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	30		<b>Full Load Torque</b>	88.7 LB-FT	
<b>Volts</b>	230/460		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	76/38		<b>Breakdown Torque</b>	330 LB-FT	
<b>R.P.M.</b>	1760		<b>Pull-up Torque</b>	142 LB-FT	
<b>Hz</b>	<b>60 Phase</b>	3	<b>Locked-rotor Torque</b>	178 LB-FT	
<b>NEMA Design Code</b>	<b>A KVA Code</b>	J	<b>Starting Current</b>	270 A	
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	17.9 A	
<b>NEMA Nom. Eff.</b>	<b>93.6 Power Factor</b>	80	<b>Line-line Res. @ 25°C</b>	0.19377 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	64°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	76°C	
			<b>Locked-rotor Power Factor</b>	30.9	
			<b>Rotor inertia</b>	4.47 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 30 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	41	63	73	80	82	85	81
<b>Efficiency</b>	87.6	92.3	93.5	93.7	93.4	92.9	93.5
<b>Speed</b>	1792.2	1787.6	1782.4	1776.5	1770.3	1762.1	1773
<b>Line amperes</b>	19.8	24.3	30.7	37.6	45.6	55.2	42.4

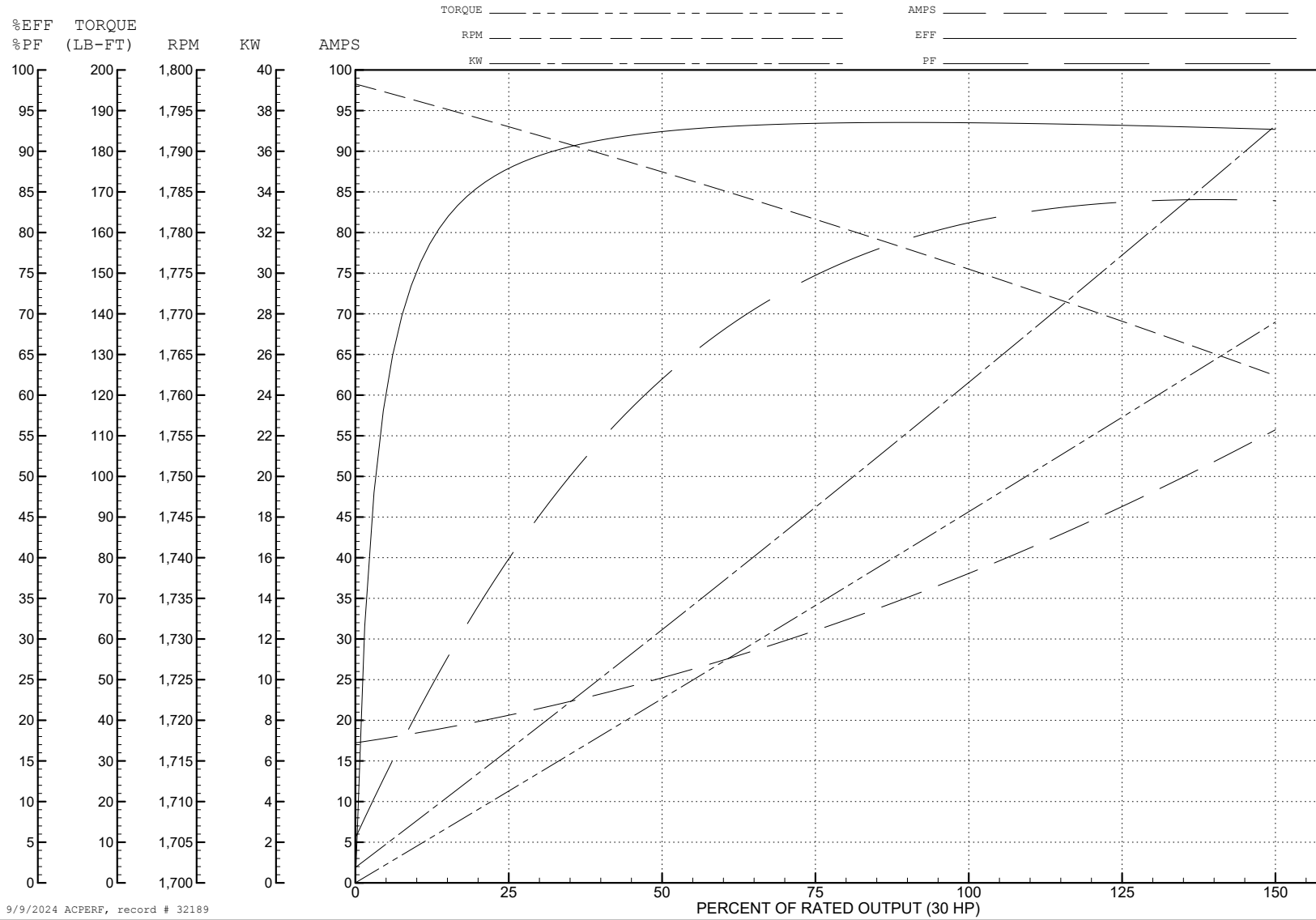
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WINDING # 10WGY538

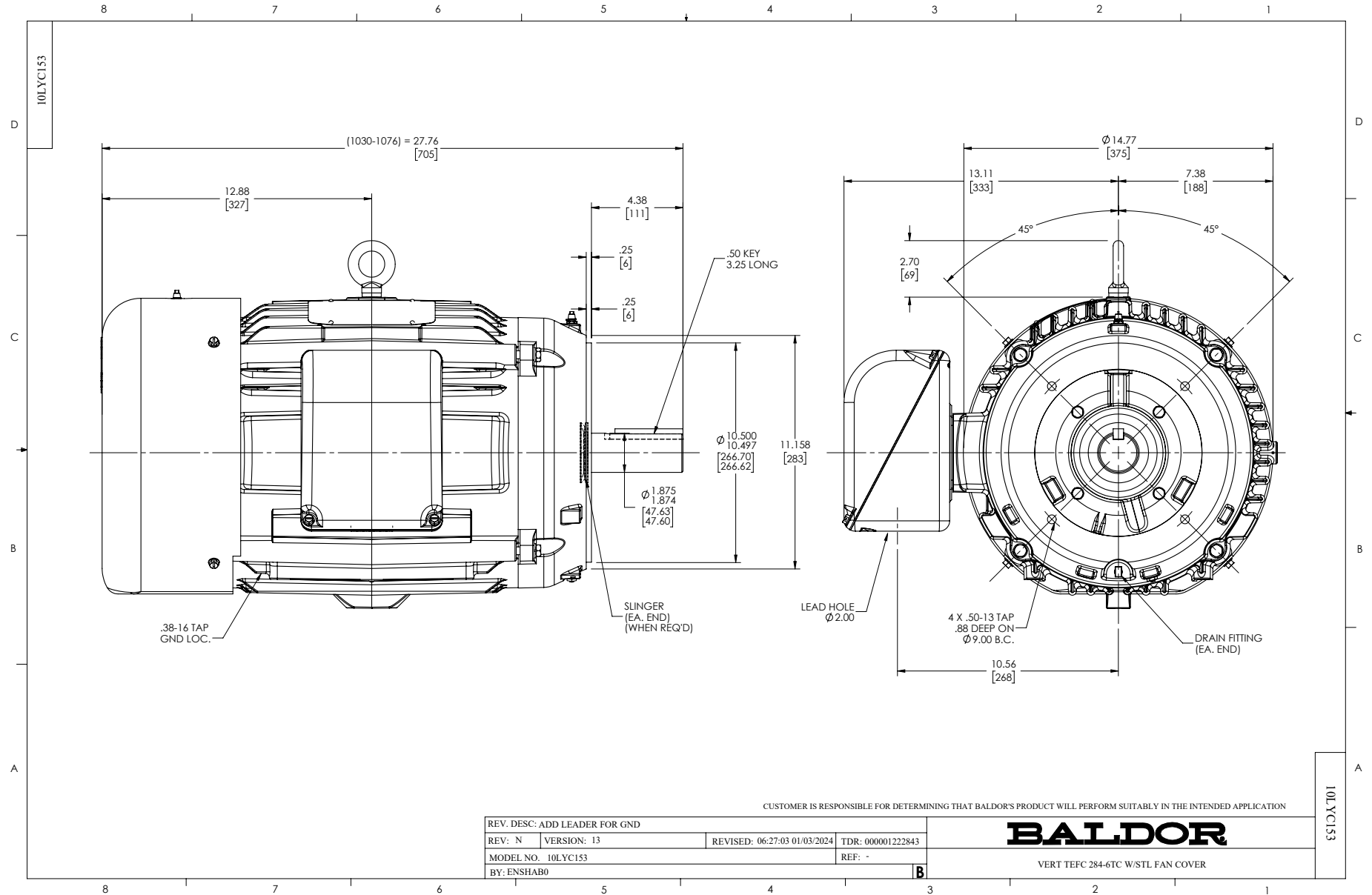
Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1760 RPM 460 V 1056M

TORQUES (LB-FT): PO=330 PU=142 LR=178 LRA=270

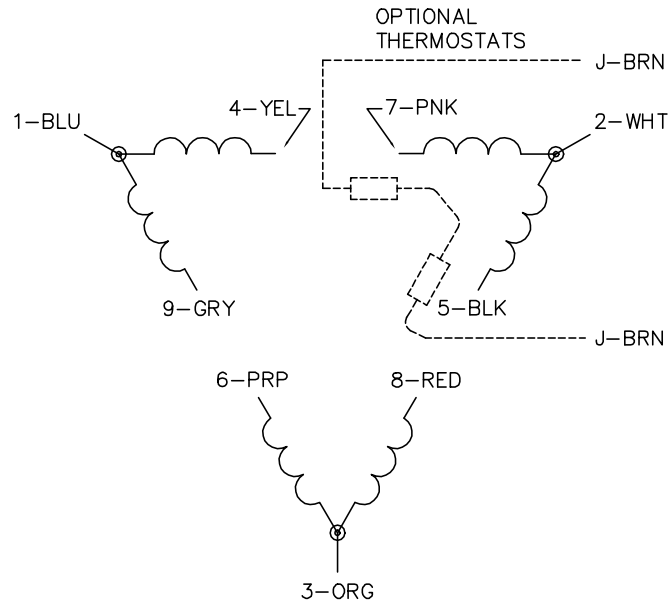


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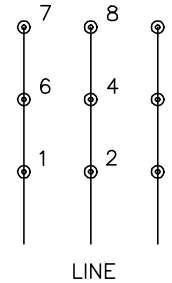




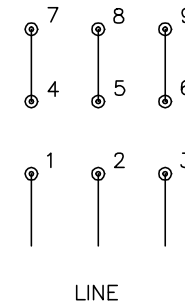
CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



**NOTES:**

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

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FILE: \AAA\00005\148	REVISED: 10: 25: 29 02/19/2019	BY: ENBRIRO
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3PH, DV, 9 LEADS, DELTA CONNECTION

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